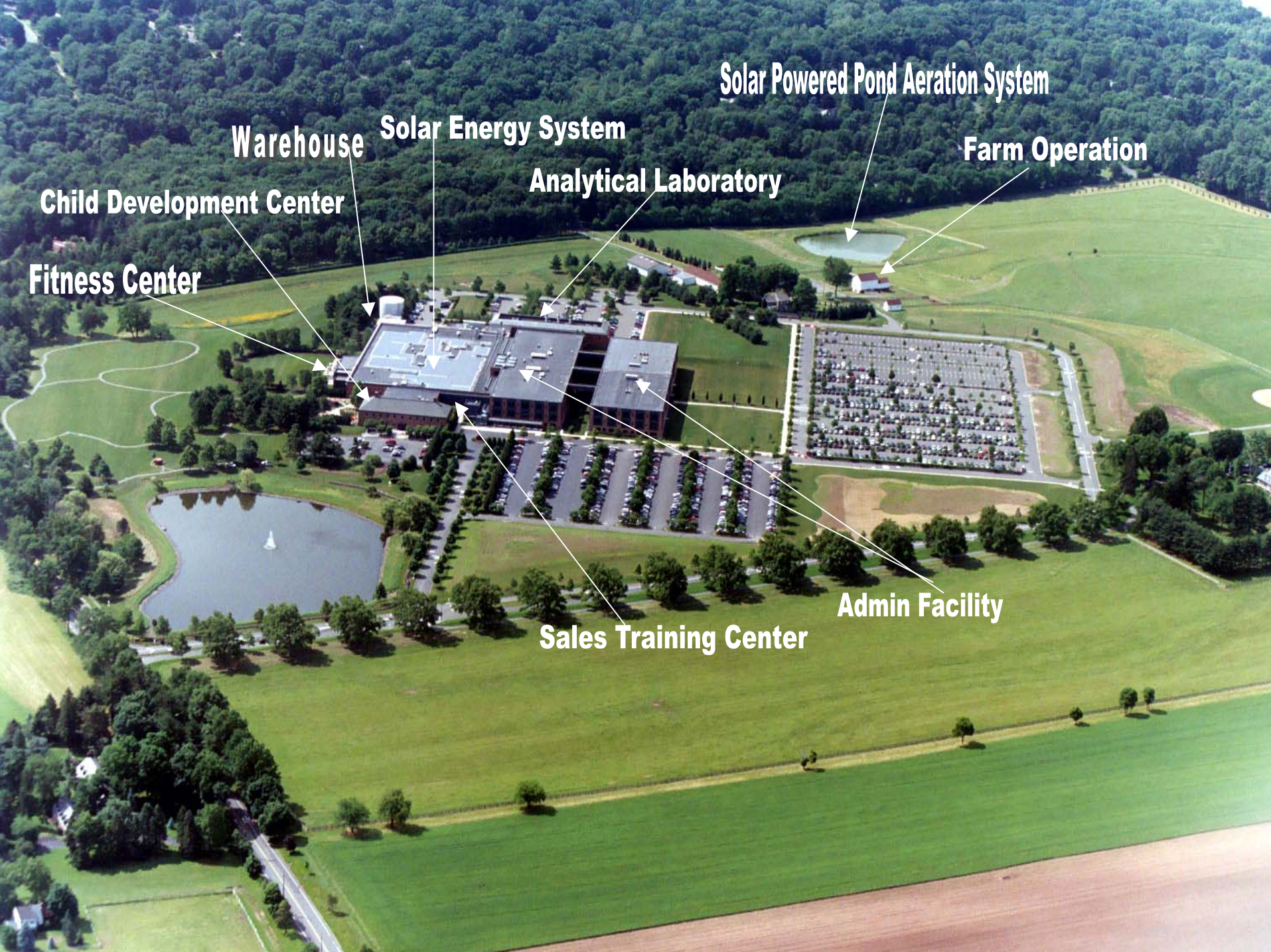


Janssen Pharmaceutica & the Stony Brook-Millstone Watershed Association Partnership in the River Friendly Certification Program



Janssen Pharmaceutica
Titusville, NJ





Warehouse

Solar Energy System

Solar Powered Pond Aeration System

Farm Operation

Child Development Center

Analytical Laboratory

Fitness Center

Admin Facility

Sales Training Center



Program Categories:

- **Water Quality Management**
- **Water Conservation**
- **Wildlife and Habitat Enhancement**
- **Education and Outreach**

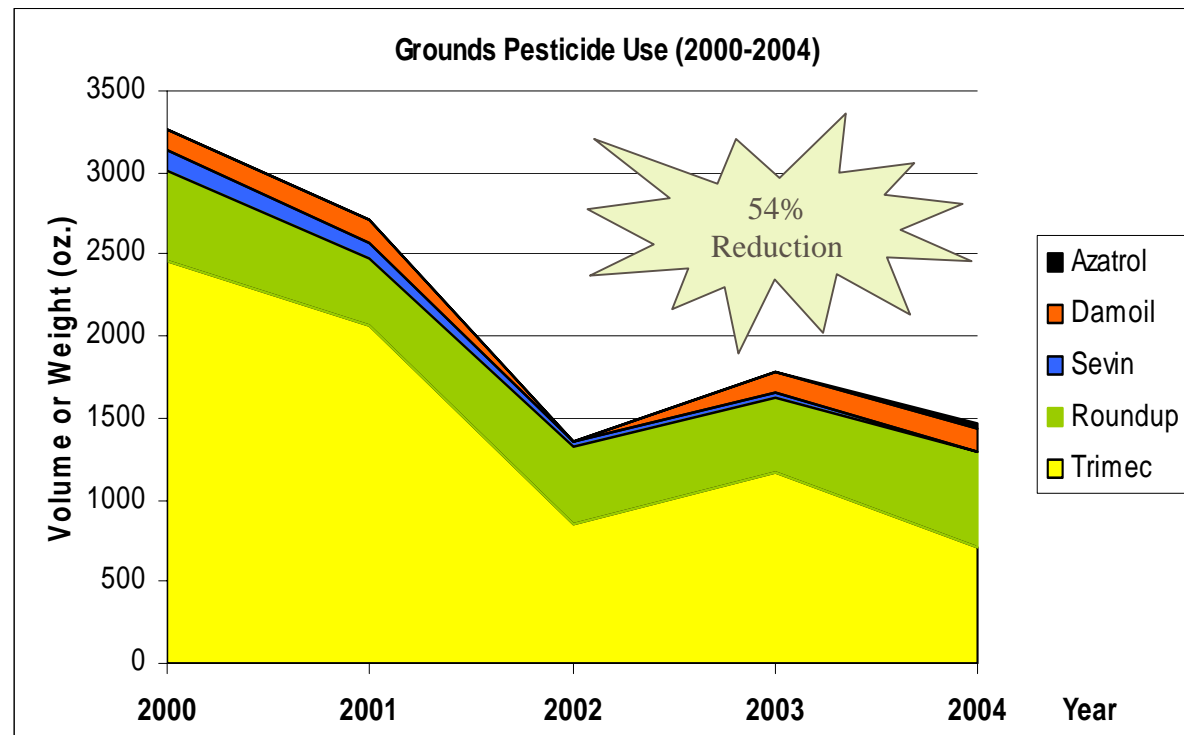
Water Quality Management Criteria



- Integrated Pest Management
- “Buffers” around water bodies
- Use of Native Plants
- Fertilizer controls
- Pond Aeration and Water Quality Monitoring
- Cooling Condensate Recycling
- Proper Chemical Handling
- Protect onsite wetlands

Integrated Pest Management

- Environmentally-sensitive use of chemicals for fertilizing and pest control
- Maintaining detailed records to track trends and “hot spots.”
- IPM training for Grounds personnel





“No-mow” and “no-spray”
zones (10-20 feet) around all
water bodies

Use of slow-release and
organic fertilizers to reduce
run-off contamination



- Ponds are closely monitored for algae growth to minimize treatment needs
- Bi-weekly monitoring minimizes treatment

The 2003/2004 Farm Pond Upgrade:

- 1) A solar-powered aeration system.
- 2) Fencing to keep out cattle = 3 acre natural buffer
- 3) Native grass and tree seedlings (50)



Farm Pond Upgrade – Analytical Results



Farm Pond Testing Data, Annual Averages				
	'02	'03	'04	'05
PH	9.7	9	8.9	9.7
Dissolved Oxygen (ppm)	18.8	10.2	10.2	16.8
Secchi (inches)	10	23	30	31

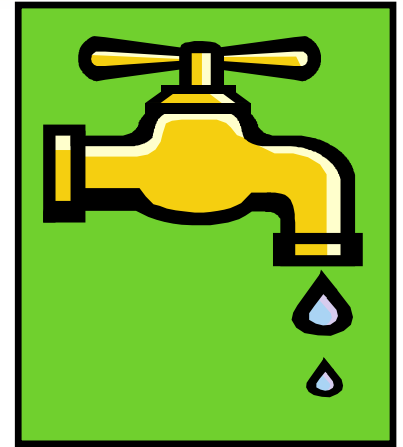
NOTE: High levels of dissolved oxygen in 2002 due to daytime algae blooms.

- Cooling condensate is recycled and not discharged to surface water
- Conserves an average of 360,000 gallons of water per year



Water Conservation Criteria

- Pond and Rain Water Re-use
- Minimize Plant Watering
- Metering to detect leaks
- Use of drought-resistant plants
- Effluent Irrigation (not feasible)





Use of pond water and
rain barrel water for
watering



(Usage ranges from
~1,000 gallons per year
to over 10,000 gallons
depending on weather)



- Watering at appropriate times and use of mulch to reduce evaporation
- Watering limited to tree saplings and minimal flowers



Site-wide water metering
for early leak detection



Stone and ornamental grasses.

(Drought-resistant grasses. Reduces labor-intensive mowing.)



Use of drought resistant native plants



Wildlife and Habitat Enhancement Criteria

- Native Plantings
- Stormwater Management
- Wetland Preservation
- Habitat Improvements
- Water Quality Improvements





Wildlife at Janssen

Birds including:

Bald Eagle (1 visitor)

Blue Herons

Horned Owls

Hummingbirds

Mallard Ducks

Bluebirds

Ospreys

Red Tail Hawks

White Swans

Woodpeckers

Mammals:

Coyotes

Eastern Black Bears

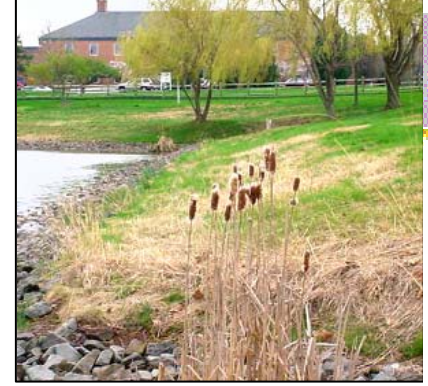
Red Fox



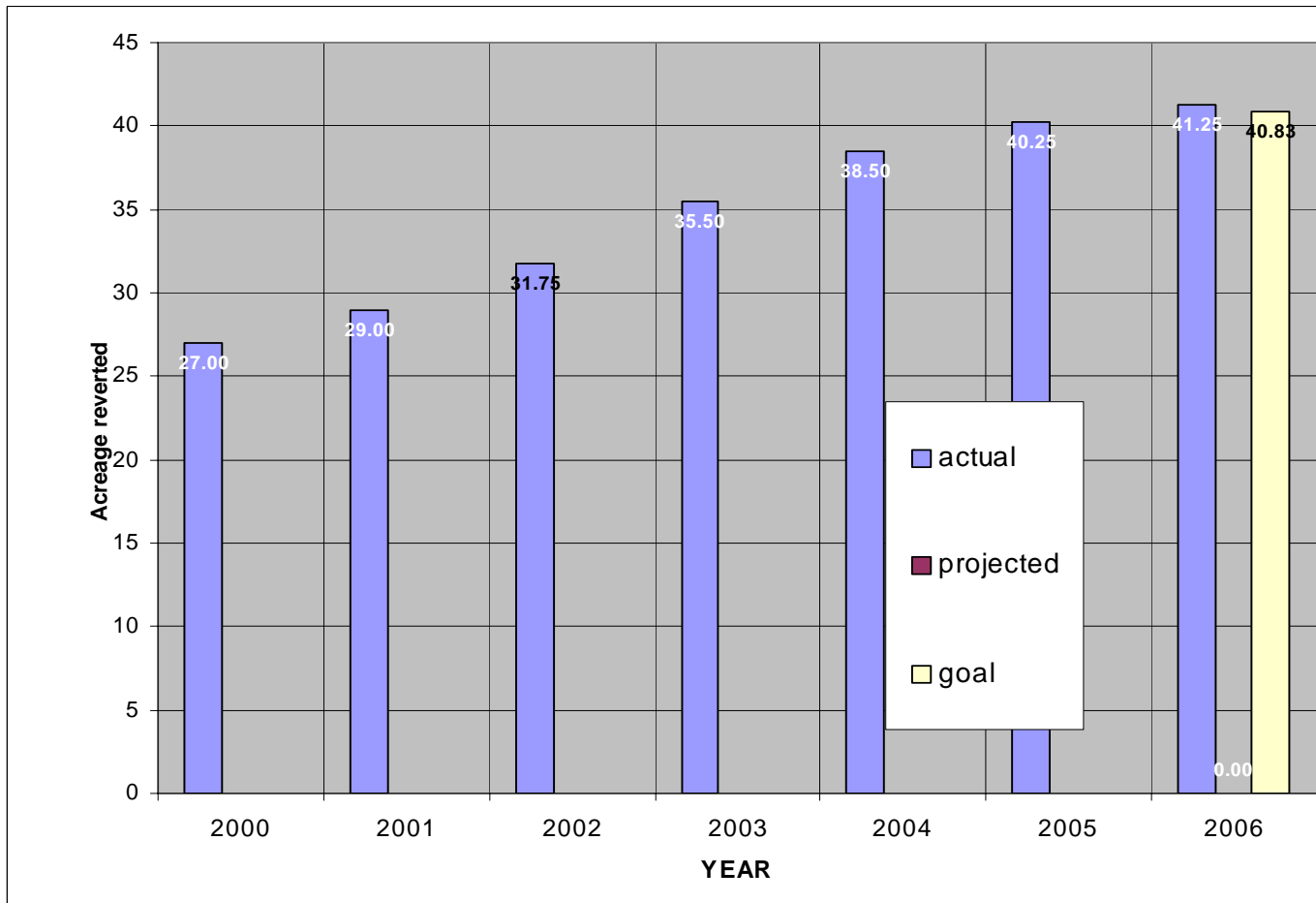
- 15 bluebird houses
- 3 bat house (600 bats)
- 2 purple martin house

Provide “non-chemical” insect control

Bluebird houses maintained by employee volunteer



**41 Acres
Preserved:
52%
Increase
Since
Year
2000!**



EPA 25% Increase in acreage 2000 – 2003
Goals: 15% Increase in acreage 2003 - 2006

Status: Exceed goal
 by ½ acre

Native Plantings / Habitat Restoration



Total 1995 - 2006, Jannsen has reduced high maintenance lawns by 45% and planted native grass and wildflowers as follows:

	Native Grasses	15.5 Acres*
	Perennial Wildflowers	14.5 Acres
	Annual Wildflowers	11 Acres
Total since 1995		41 Acres

* Includes 1.5 acres of native grasses planted around perimeter of site in 2005 [not shown on map]

Annual Wildflowers – Dwarf Cosmos



Annual and perennial wildflowers including Bachelor Buttons and Cosmos.

(Plantings around trees reduces labor intensive mowing,
which further reduces costs and environmental impact).

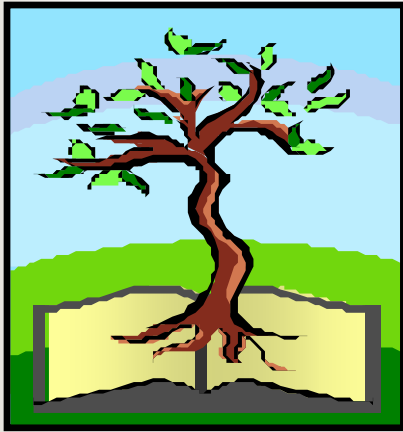


Perennial wildflowers, including Bachelor Buttons, Black-eyed Susans, Plains Coriopsis, Indian Blanket



Perennial wildflowers, including . . .
Corn Flowers, Black-eyed Susans, Poppies,
Bachelor Buttons, and Snap Dragons.





Education and Outreach

Annual partnerships with NGOs and vendors





Questions?